

### **ABSTRACT Amendment**

Please insert the following on a new sheet at the end of the specification as an abstract:

A method for generating a genetically modified organism for drug screening is presented in which heterologous expression of at least one protein is caused in the organism followed by analysis of the modified gene expression pattern of the expressing organism and phenotyping by altering the expression of the compensating differentially regulated genes. Assays using the genetically modified organism are also presented.